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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,324	01/31/2002	Kirk B. Brown	004-6912	3980
32658	7590	12/01/2005	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEEN ST. DENVER, CO 80202			POLLACK, MELVIN H	
			ART UNIT	PAPER NUMBER
			2145	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/062,324	BROWN, KIRK B.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Melvin H. Pollack	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11-26, 30-39 and 41-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-26, 30-39 and 41-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                                   |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)       |
| Paper No(s)/Mail Date _____                                                             | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-45 have been considered but are moot in view of the new ground(s) of rejection.
2. The IDS has already been considered.
3. The 112 rejections and claim objections have been withdrawn.
4. For claims 19 and 26, the applicants have amended the claims such that the server routing is based not on data content type but on language and/or browser type information (P. 10, lines 26-28). The examiner will add new art to teach these limitations.
5. For claim 4, applicant has amended the claim to add that the wireless device has a virtual network address (P. 12, lines 5-7). The examiner will add new art to teach this limitation.
6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "select a network element at a physical network address (P. 12, line 8)") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The address translation from virtual to physical address is not written in the claims.
7. In response to applicant's argument that the flow switch/gateway would behave as a proxy (P. 12, lines 14-16), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably

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distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

8. For claims 35 and 45, the applicants have amended the claims such that the criteria for selection includes several options (P. 12, lines 24-33). One of the criteria is service request type, which the examiner interprets as functionally equivalent to data content type taught as shown in the last office action. Further, the art added for claims 19 and 26 will also fulfill this limitation. The examiner will add art for location and/or device type.

9. Applicant claims that there is no teaching of a set of rules being applied to make the decision (P. 13, lines 2-3). The examiner disagrees. By the applicant's own words, Colby teaches the selection decision based on matching content to predefined definitions (P. 13, lines 1-2) and this fulfills the definition of a set of rules being applied in the decision process. Further, the cited art states clearly that "the CSD [content server database] maintains several databases.... One database maintained by the CSD contains *content rules* which are defined by the system administrator and which indicate how the flow switch 110 should handle requests for content (col. 6, lines 45-55)." Thus, this rejection is maintained.

10. For claims 1 and 12, the applicant amends to add that the evaluation is performed by evaluating key strings within the data (P. 13, lines 17-18). The examiner interprets this limitation as simply searching the packet for recognizable words (i.e. hola instead of hello), but can also include finding addresses or other information within the packet. New art will be added to show this limitation.

11. In light of the art added by necessity in response to the amendment, this rejection is made final.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-8, 11, 12, 14, 16-18, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (6,449,647) in view of Hunter (6,865,608) and Beser et al. (6,523,068).

14. For claim 1, Colby teaches a system and method (abstract) for placement in a communication path (Fig. 1b, #110) between a client device (Fig. 1b, #135) and a plurality of computer network elements (Fig. 1c, #100), the apparatus comprising (col. 1, line 1 – col. 4, line 15):

- a. A data port (Fig. 1c, #170) configured to receive data in accordance with a data protocol (col. 6, lines 12-33); and
- b. A redirection engine (Fig. 1c, #110) coupled to inspect the received data (Fig. 2) and direct corresponding data (Fig. 2, #212) in accordance with the data protocol to a particular one of the plurality of computer network elements (Fig. 1, #165).

15. Colby does not expressly disclose that the network and related protocol may be wireless. Hunter teaches a method (abstract) of content reception and redirection (col. 1, line 1 – col. 4, line 35) in which data is transmitted over a wireless network (Fig. 1). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

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16. Colby does not expressly disclose detecting one or more key strings in the data corresponding to the wireless data protocol, and providing a particular wireless service based on the wireless data protocol, wherein the particular one is selected from two or more computer network elements each providing differing wireless services based on differing wireless data protocol. Besser teaches a method (abstract) of processing flows and providing service based upon the protocol (col. 1, line 1 – col. 3, line 40) within a wireless network (col. 5, lines 25-40) wherein an indicator is used to ensure that the request message is examined for its content (col. 9, lines 10-20), wherein data key strings are used to provide different wireless services (col. 13, line 55 – col. 15, line 45). At the time the invention was made, one of ordinary skill in the art would have added Besser key string searching in order to provide greater security (col. 1, lines 40-55; col. 2, lines 5-20).

17. For claims 4, 12, Colby and Hunter do not expressly disclose that the receiving, selecting, and directing are performed at a proxy to which the wireless client device directs wireless data protocol traffic via a virtual network address, although Colby does disclose that the selecting and directing are performed at a proxy to which the wireless client device directs wireless data protocol traffic (col. 5, lines 28-67). Besser teaches this virtual-to-physical address mapping (col. 20, line 37 – col. 25, line 50). At the time the invention was made, one of ordinary skill in the art would have added these virtual-physical aspects to Colby in order to provide greater security (col. 2, lines 5-40). Since claim 1 is rejected, claims 4 and 12 are also rejected for the reasons above.

18. For claims 2, 8, Colby does not expressly disclose that the particular one of the plurality of computer network elements is a gateway that transforms between the wireless data protocol

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and a network protocol. Hunter teaches this limitation (Fig. 4; col. 2, lines 10-35). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

19. For claim 3, Colby teaches that a wireless data packet decoding module coupled to the redirection engine (col. 8, lines 20-60; col. 9, lines 5-25).

20. For claim 5, Colby teaches that the selecting is based at least in part on a load balance criterion (col. 9, lines 25-40).

21. For claim 6, Colby teaches that the selecting is based at least in part on information encoded in a header of the received wireless data protocol message (Figs. 3 and 4; col. 9, lines 5-25).

22. For claim 7, Colby teaches that the selecting is based at least in part on content of the received wireless data protocol message (col. 6, lines 1-35).

23. For claims 11, 38, Colby does not expressly disclose that the wireless data protocol includes support for wireless application protocol (WAP) traffic. Hunter teaches this limitation (col. 6, lines 25-35). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

24. For claim 14, Colby teaches a third gateway cluster (Fig. 1a, #R5).

25. For claim 16, Colby teaches a load balancing server coupled to the first gateway cluster and the second gateway cluster (Fig 21).

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26. For claim 17, Colby teaches a notification server, a wireless data server and storage repository and an internet data server and storage repository, all of which are responsive to the load balancing server (col. 6, line 40 – col. 7, line 25).

27. For claim 18, Colby teaches that the load balancing server allocates data traffic between the first and the second gateway cluster (Fig. 6).

28. Claims 19-21, 26, 30-37, 39, 41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby, Hunter and Besser as applied to claim 12 above, and further in view of Merz (5,428,772) and Larson et al. (2003/0069848).

29. Claims 19, 20, 26, 35, and 45 are drawn to the limitations in claim 12. Claim 19 adds that a packet is evaluated to determine at least one of language information and user browser type information, and the data is sent to a particular server, the server chosen based on at least one of the aforementioned three types of information. Colby teaches the server choosing limitation (Fig. 4; #429; col. 9, lines 5-20), but does not expressly disclose choosing based upon language or browser type.

30. Merz teaches a method and system (abstract) of handling languages (col. 1, line 1 – col. 4, line 40), wherein a client-server interaction (col. 5, line 65 – col. 6, line 15), wherein the requests are processed and routed based on language (Fig. 18). At the time the invention was made, one of ordinary skill in the art would have added Merz to Colby in order to develop greater transparency of message handling (col. 3, lines 5-15).

31. Larson teaches a method and system (abstract) of providing different options and different processing methods (Para 1 – 13) in a wireless network environment (Paras. 20-22) in



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which access depends on several factors including protocol, device type, and browser type (Pars. 109 – 128). At the time the invention was made, one of ordinary skill in the art would have added Larson device methods to Colby in order to tailor user interactions based on device and browser type (Para 10).

32. Therefore, since claim 12 is rejected, claims 19 and 20 are also rejected for the reasons above.

33. For claims 21, 37, Colby does not expressly disclose that the data packet is a wireless application protocol binary encoded packet data unit. Hunter teaches this limitation (col. 6, lines 5-45). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

34. For claim 30, Colby teaches an internal data bus (Fig. 2, #202) responsive to data packets communicated using the first (Fig. 1c, #165) and second data ports (Fig. 1c, #170).

35. For claim 31, Colby teaches a shortcut engine responsive to the parsing engine (Fig. 5).

36. For claim 32, Colby teaches a shortcut table responsive to the shortcut engine (col. 10, line 60 – col. 11, line 10).

37. For claim 33, Colby teaches a data packet forwarding engine responsive to the parsing engine (Fig. 2, WFR).

38. For claim 34, Colby teaches a data packet forwarding table responsive to the data packet forwarding engine (Fig. 4, #429 and #430).

39. For claim 36, Colby teaches that the logic module determines the internet protocol address by selecting from a set of predetermined addresses, each of the predetermined addresses

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identifying a distinct server that is a member of a multi-server cluster (Fig. 22; col. 10, lines 10-20).

40. For claim 39, Colby teaches that the decoded wireless data packet is transmitted in accordance with a data transmission protocol over a computer network (col. 6, lines 10-35).

41. For claim 41, Colby teaches a computer server to receive and process the wireless data content (col. 5, lines 30-45).

42. Claims 13, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 12, 19 above, and further in view of Shiigi (6,304,898).

43. For claim 13, Colby and Hunter do not expressly disclose that the first gateway cluster is an electronic mail gateway cluster and the second gateway cluster is a wireless application protocol gateway cluster. Shiigi teaches a method (abstract) of providing e-mail cluster to WAP cluster functionality (col. 1, line 1 – col. 2, line 67) with this limitation (col. 9, line 25 – col. 10, line 40). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

44. For claim 22, Colby and Hunter do not expressly disclose that the particular server is an electronic mail server and further comprising communicating the data request, via an internet data packet message, to the electronic mail server. Shingi teaches this limitation (Figs. 4-6). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

45. For claim 23, Colby and Hunter do not expressly disclose an electronic mail message from the electronic mail server at the wireless gateway. Shingi teaches this limitation (Fig. 6,

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#640). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

46. For claim 24, Colby and Hunter do not expressly disclose binary encoding the electronic mail message into a binary encoded form. Shigi teaches this limitation (Fig. 2A, #6). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

47. For claim 25, Colby and Hunter do not expressly disclose converting the electronic mail message into wireless application protocol format for transmission by wireless equipment to a remote mobile computing device. Shigi teaches this limitation (col. 9, lines 25-40). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

48. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 12, 14 above, and further in view of Ryu et al. (6,775,291).

49. For claim 15, Colby and Hunter do not expressly disclose that the third gateway cluster is a short message service gateway cluster. Ryu teaches a method (abstract) of providing wireless content services (col. 1, line 1 – col. 4, line 25) including this limitation (col. 4, line 50 – col. 5, line 65). At the time the invention was made, one of ordinary skill in the art would have used Ryu's SMS to WAP system in Colby and Hunter in order to allow improved handling of WAP systems (col. 2, lines 35-45).

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50. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 35, 41 above, and further in view of Abjanic (6,732,175).

51. For claim 42, Colby and Hunter do not expressly disclose that the wireless data content includes financial transaction data and the remote computer network element comprises a computer server executing an electronic commerce application to handle a financial transaction based on the financial transaction data. Abjanic teaches a method (abstract) of switching based on content data (col. 1, line 1 – col. 2, line 30) for wireless networks (col. 3, lines 47-65) and load balancing (col. 4, lines 14-20) in which financial transaction data is utilized (col. 9, lines 55-67). At the time the invention was made, one of ordinary skill in the art would have added Abjanic to Colby and Hunter in order to allow for a greater array of application programs (col. 4, lines 21-60).

52. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claim 35 above, and further in view of Lennie et al. (6,836,845).

53. For claim 43, Colby and Hunter do not expressly disclose that the computer network input, the decoding module, and the logic module are all contained within a gateway system that is security protected. Lennie teaches a method (abstract) of transaction processing (col. 1, line 1 – col. 3, line 55) including forwarding and routing transactions (col. 10, lines 43-50) in a wireless environment (Fig. 7) wherein switching components are security protected (Fig. 6). At the time the invention was made, one of ordinary skill in the art would have been motivated to use Lennie's security systems in Colby and Hunter in order to prevent fraud and unauthorized accesses (col. 1, lines 25-35).

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54. For claim 44, Colby and Hunter do not expressly disclose that the virtual gateway system is security protected by a data firewall located between the virtual gateway system and a public computer network. Lennie teaches this limitation (col. 7, lines 25-50; col. 8, lines 38-50). At the time the invention was made, one of ordinary skill in the art would have been motivated to use Lennie's security systems in Colby and Hunter in order to prevent fraud and unauthorized accesses (col. 1, lines 25-35).

### *Conclusion*

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They provide further teachings regarding the usage and handling of different wireless messages, including those of various protocols, device types, languages, and the like.

56. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887.

The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP  
28 November 2005

  
ZARNI MAUNG  
SUPERVISORY PATENT EXAMINER